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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,208	02/25/2002	Akira Iizuka	39303-20307.00	5089

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EXAMINER

NATNAEL, PAULOS M

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/084,208	IIZUKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paulos M. Natnael	2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 10 is/are allowed.
- 6) ☒ Claim(s) 1,5,7,8 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control instructing operators, indicators, designation section, contact-type operator, function-shift instructing section, operation section, in claims **1,4, 6,10, 11** and must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Higurashi, U.S. Pat. No. 6,393,162.

Considering claim 11, a video mixer apparatus comprising:

a) a video-picture-signal input section that receives video picture signals via a plurality of channels, each of the video signals containing a plurality of predetermined components, is met by Frame memories 10a-10c, fig.1, that receives the plurality of video signals.

b) a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received via said video-picture-signal input section, is met by image synthesizing portion 6, fig.1;

c) an operator; and operation section capable of performing an arithmetic or logical operation on the basis of operation of said operator and using a portion or all of the

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plurality of predetermined components contained in the video picture signals of the individual channels, is met by the angle-of-view calculating portion 30, fig.1 which comprises calculating and interpolation circuits.

d) wherein said video-picture-signal synthesis section can synthesize the video picture signals of the individual channels using a result of the arithmetic or logical operation performed by said operation section, is met by image synthesizing portion 6, fig.1, which receives the output of cylindrical conversion portions 31a-31c which in turn received the output of the angle-of-view calculating portion 30, fig.1.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5, 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higurashi, U.S. Patent No. 6,393,162.

Considering claim 1, Higurashi discloses the following claimed subject matter, note;

a) a video-picture-signal input section that receives video picture signals via at least three or more channels, is met by Frame memories 10a-10c, fig.1;

d) a video-picture-signal synthesis section that synthesizes the video picture signals of the individual channels having been subjected to the signal control by said control section, is met by image synthesizing portion 6, fig.1;

c) a control section that performs signal control on the video picture signals of individual ones of the channels on the basis of respective ones of the signal control instructions given by said control instructing operators, **is implied because** without a control that control the overall operations of the apparatus, the system may not function properly.

Except for;

b) at least three or more control instructing operators provided in corresponding relation to the at least three or more channels, each of said control instructing operators being operable to give a signal control instruction for a corresponding one of the channels in accordance with an operated amount of the control instructing operator;

Regarding b), Higurashi discloses the angle-of-view calculating portion 30 which reads adjacent images from the frame memories 10a, 10b and 10c so as to estimate angles of view. (col. 7, lines 45+) Furthermore, the angle-of-view calculating portion 30 illustrated in fig. 4 shows interpolation calculating portions 42a and 42b. Therefore, although Higurashi does not specifically disclose a third interpolation calculating portion, since Higurashi already teaches three input images, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Higurashi by providing one or more interpolation calculating portions, so that the system may be able to handle more input signals making the system more versatile thus useful.

Considering claim 5, a video mixer apparatus as claimed in claim 1 which further comprises an output section that outputs a synthesized video picture signal having been created by said video-picture-signal synthesis section, and wherein said output section is further capable of independently and simultaneously displaying, on a single screen, the video picture signals of all of the channels that are to be synthesized, is met by all-round image correction portion, Figs. 6 and 7;

Considering claim 7, a video mixer apparatus comprising: a video-picture-signal input section that receives video picture signals via at least three or more channels; a video-picture-signal synthesis section that synthesizes the video picture signals of individual ones of the channels received by said video-picture-signal input section; at least three or more control instructing operators provided in corresponding relation to the channels, each of said control instructing operators being operable to give a signal control instruction about at least one of a displayed position and displayed size of the video picture signal of a corresponding one of the channels; and a control section that performs signal control on each of the video picture signals of the channels to be synthesized by said video-picture-signal synthesis section, in accordance with the signal control instruction given by said control instructing operator corresponding to the channel of the video picture signal.

Regarding claim 7, see rejection of claim 1;

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Considering claim 8,

a) a storage section that, for each of the channels, stores signal control-instructing information about at least one of the displayed position and displayed size, is met by Frame memories, figs 1.

b) and wherein said control section performs signal control, corresponding to the signal-control instructing information for the individual channels read out from said storage section, on the video picture signals of the channels to be synthesized by said video-picture-signal synthesis section.

Regarding b) see rejection of claim 1(c).

#### ***Allowable Subject Matter***

6. Claims 6 and 10 are allowable over the prior art.

7. Claims 2-4, 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose a video mixer comprising, a designation section that designates the video picture signals of two desired channels from among the video picture signals to be synthesized by said video-picture-signal synthesis section; a contact-type operator that, by being contacted at a predetermined position thereof, gives a signal control instruction, corresponding to the contacted predetermined position, with respect to the designated video picture signals of the two desired



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channels, as in claim 6; a function-shift instructing section that instructs a shift between a plurality of display functions including at least a solo function, cue function and preview function, the solo function being a function for selecting a particular channel from among the at least three or more channels and displaying only a video picture signal of the particular channel, the cue function being a function for selecting a particular channel from among the at least three or more channels and displaying a video picture signal of the particular channel in a different style from video picture signals of the other channels, the preview function being a function for previewing a video picture signal of a desired one of the channels, as in claim 10;

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sullivan et al. U.S. Patent No. 6,593,973 discloses providing information in video transitions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN  
August 22, 2004

  
**PAULOS M. NATNAEL**  
**PATENT EXAMINER**